BookletChart

Keweenaw Waterway - Including Torch Lake

(NOAA Chart 14972)



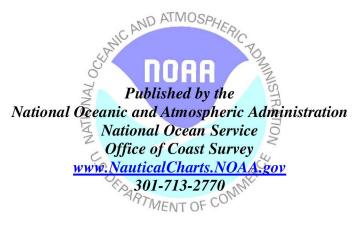
A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts

☐ Compiled by NOAA, the nation's chartmaker. AD ATM



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What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart $^{\text{\tiny TM}}$?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 13 excerpts] (152) Keweenaw Waterway, Waterway, Keweenaw 14972about 25 miles long, crosses Keweenaw Peninsula from Keweenaw Bay on the SE side to the open water of Lake Superior on the NW side. The waterway follows Portage River from its mouth in Keweenaw Bay for 5 miles to Portage Lake, thence extends for 17.5 miles through the lake to its head, and thence follows a dredged cut from the head of Portage Lake to Lake Superior.

(157) **Keweenaw Waterway Lower Entrance Light** (46°58.1'N., 88°25.9'W.), 68 feet above the water, is shown from a white octagonal tower on the outer end of the breakwater on the E side of the Keweenaw Bay entrance to the waterway; a fog signal is at the light.

(158) **Portage River Harbor of Refuge** is just inside the lower entrance to the waterway at the mouth of Portage River. This 0.5-mile-long basin has a revetment with bollards on the W side where vessels may moor. (160) **Portage River**, the natural outlet of Portage Lake, forms part of the Keweenaw Waterway for 5 miles from its mouth in Keweenaw Bay to Portage Lake.

(162) **Portage Lake**, about 17.5 miles long, is generally narrow, resembling a river, but has no sensible current. The lower 3.5 miles of the lake, locally known as Big Portage, is over 2 miles wide. Portage River flows from the SE corner of the lake, and **Pike Bay** is in the SW corner, the two being divided by the flats at the mouth of **Sturgeon River**. About 3 miles N of the head of Portage River, the lake is divided by **Grosse Point. Torch Bay** extends E from the point. The main body of the lake extends 2 miles N, thence turns W at **Pilgrim Point** for about 5.5 miles between the towns of Hancock and Houghton, and thence extends N for about 5 miles to the head of the lake. Above Grosse Point, the lake narrows to 0.5 mile and in the upper part has widths of 0.15 to 0.4 mile. (164) **Pike Bay**, at the SW corner of Portage Lake, is entered through a narrow channel with depths of about 9 feet. The pile remains of a former lumber wharf are on the W side of the bay at the village of **Chassell**, **Mich.**

(165) **Torch Bay** extends NE and bends N for about 6 miles from Grosse Point. The bay narrows from about 1.3 miles wide at the mouth to 0.15 mile at the head. The lower part of the bay is deep, but the upper part is shallow. **Torch Lake Canal** connects the head of the bay with Torch Lake. A narrow channel, marked by buoys, leads for 4 miles through the upper part of Torch Bay and Torch Lake Canal. In 1972, the channel had a controlling depth of 19 feet. **Torch Lake** is about 5 miles long with a maximum width of 1.5 miles. The towns of **Lake Linden** and **Hubbell** and a few logging plants are on the NW side of the lake. Coal is received at a wharf at Hubbell. For several years, extensive stamp sand deposits along the W shore of the lake were in the process of being removed for reprocessing and redeposit into the lake, causing a continuing change in the shoreline and depths. These reclamation operations ceased prior to 1970.

(166) **Dollar Bay** is a small inlet 2 miles N of Grosse Point on the turn of Portage Lake opposite Pilgrim Point. A repair yard on the NW side of the entrance to the bay at the village of **Dollar Bay, Mich.,** makes hull and engine repairs to small craft and fishing vessels.

(167) Heating oil and diesel fuel are received at a wharf operated by Standard Oil Co. 0.6 mile W of the mouth of Dollar Bay. The wharf has 250 feet of berthing space with dolphins, a reported depth of 22 feet alongside, a deck height of 6 feet, and tank storage for 166,000 barrels. Upper Peninsula Power Co. receives coal at a wharf 0.4 mile W. The wharf is 880 feet long with a reported depth of 20 feet alongside and a deck height of 6 feet. There is storage for 80,000 tons of coal. (168) Hancock, Mich., on the N side of Portage Lake 3.5 miles W of Dollar Bay, and Houghton, Mich., on the S side of the lake opposite, are the largest communities on Keweenaw Waterway. Houghton is a customs station. Hancock has two large hospitals. The wharves at Hancock are in good condition, but most of those at Houghton are becoming ruins.

(171) A marina developed by the Michigan State Waterways
Commission at Hancock, just E of the lift bridge, provides transient
berths, gasoline, diesel fuel, water, electricity, sewage pump-out,
launching ramp, and harbormaster services. The harbormaster monitors
VHF-FM channels 16 and 9. Dock space for small craft is also available
at the village of **Ripley, Mich.**, just E of Hancock. A public docking
facility for day use only is at Houghton, just E of the lift bridge.
(174) **Keweenaw Upper Entrance Light** (47°14.1'N., 88°37.8'W.), 82
feet above the water, is shown from a white square tower on the outer end
of the E breakwater at the Lake Superior entrance to Keweenaw
Waterway; a fog signal is at the light. The outer end of the W breakwater
is marked by a light.

(175) **Portage Coast Guard Station** is on the E side of the waterway about 0.2 mile W of the lift bridge at Hancock.



Corrected through NM May 22/04 Corrected through LNM May 11/04

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

Cable Area

Additional uncharted submarine pipelines and Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and sub-marine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring dragging, or trawling.

anchoring, dragging, or trawling.
Covered wells may be marked by lighted or

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of ref-erence for the charted depths, if the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

Official reaction | Capprovimate location|

⊙(Accurate location) o(Approximate location)

PRINT-ON-DEMAND CHARTS

PHINI-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 4 nautical miles from the antenna site, but can be as much as 100 nautical miles for that articles the stations at high elevations.

Houghton, MI

WXK-73 162.400 MHz (Chan WX-2)

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

NO-DISCHARGE ZONE, 40 CFR 140

Michigan waters of Lakes Michigan, Huron, Superior,
Erie and St. Clair, all waterways connected thereto, and all
inland lakes are designated as a No-Discharge Zone (NDZ).
This chart falls entirely within the limits of a No-Discharge
Zone (NDZ). Under the Clean Water Act, Section 312, all
vessels operating within a No-Discharge Zone (NDZ) are
completely prohibited from discharging any sewage, treated
or untreated, into the waters. Commercial vessel sewage
shall include graywater. All vessels with an installed marine
sanitation device (MSD) that are navigating, moored,
anchored, or docked within a NDZ must have the MSD
disabled to prevent the overboard discharge of sewage
(treated or untreated) or install a holding tank. Regulations
for the NDZ are contained in the U.S. Coast Plot.
Additional information concerning the regulations and
requirements may be obtained from the Environmental
Protection Agency (EPA) web site: http://www.epa.gov/
oww/oceans/vessel_sewage/vsdnozone.html.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

Table of Selected Chart Notes

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1992 must be corrected an average of 0.574* southward and 0.794* westward to agree with this chart.

POLLUTION REPORTS

PULLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toil free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot.</u>

NOTE B

The channel legend reflects the Corps of Engineers project depth. The Corps of Engineers publishes the controlling depth periodically in the U.S. Coast Guard Local Notice to Mariners. For further information on channel depths, direct inquiries to the Office of the District Engineer, Corps of Engineers, Detroit, Michigan.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

NOTES

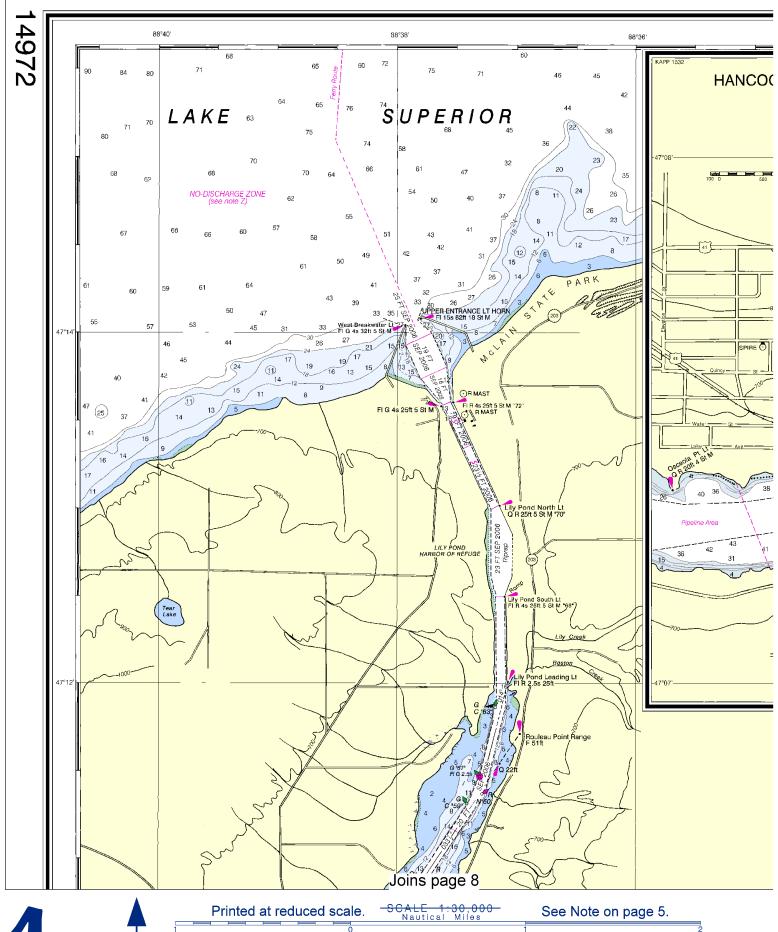
PLANE OF REFERENCE OF THIS CHART (Low Water Datum)... Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information

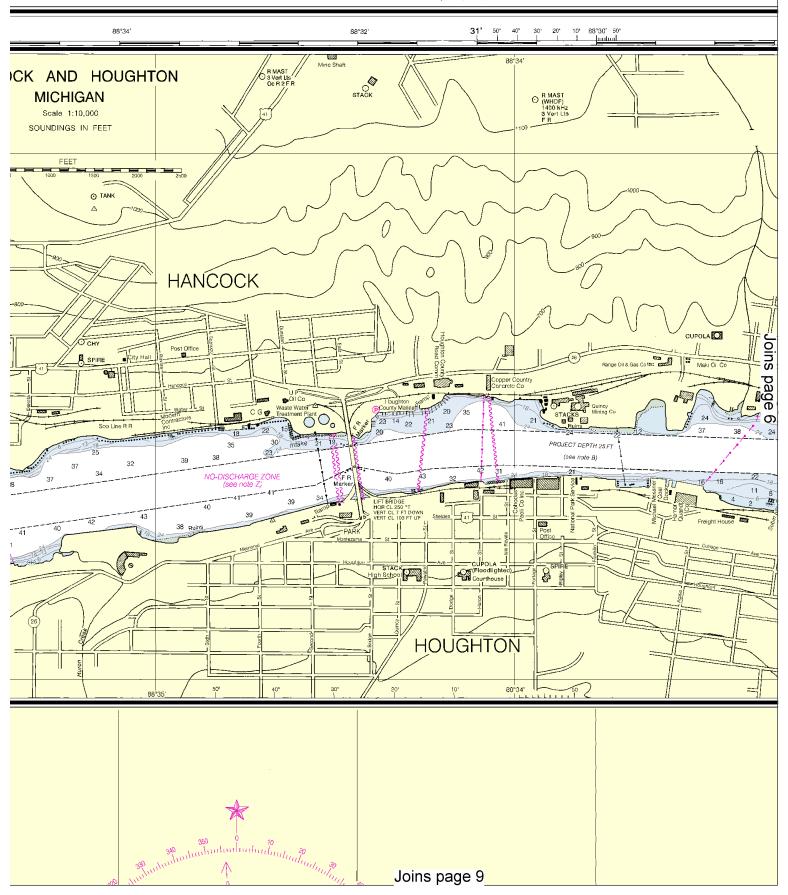
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart



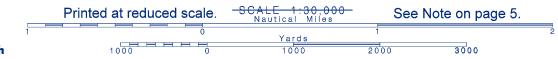






This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:40000. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

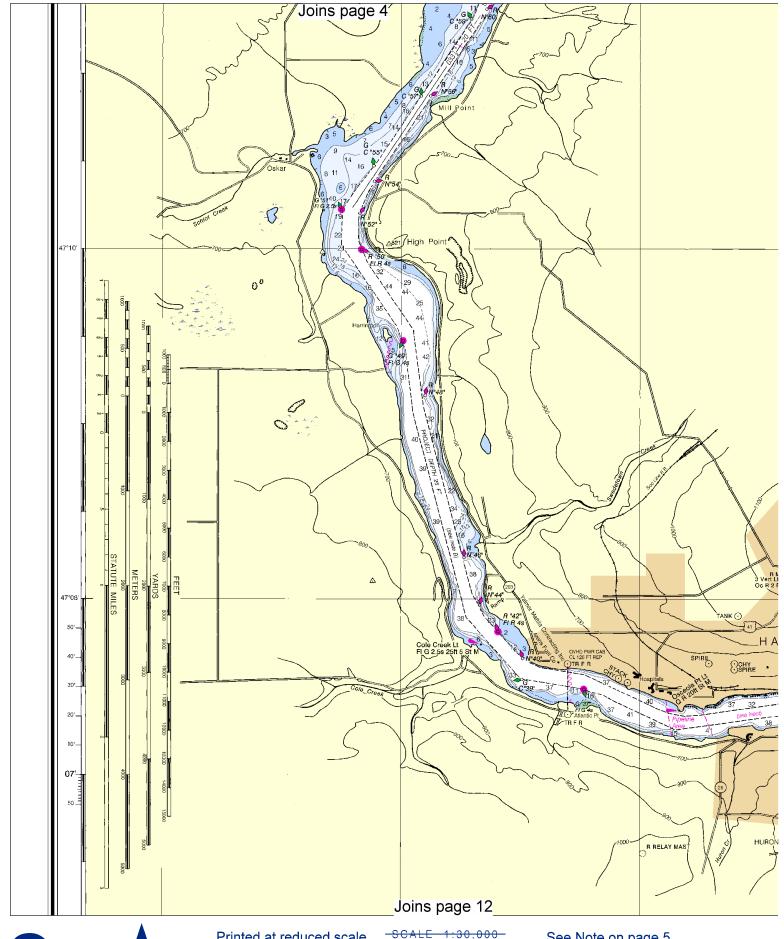




SOUNDINGS IN FEET 88°26 SOURCE Lake Survey Surveys partial bottom coverage US Government Surveys 47°14' 47°04 SOURCE DIAGRAM The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charling. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot. [®]Joins page 11

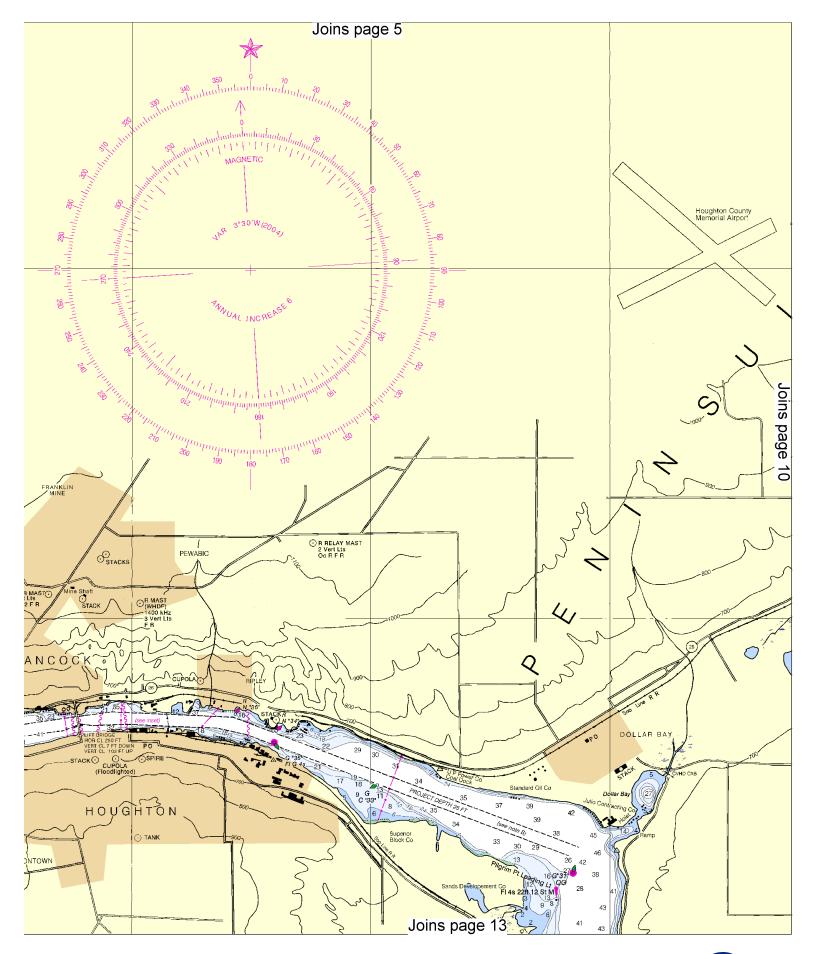


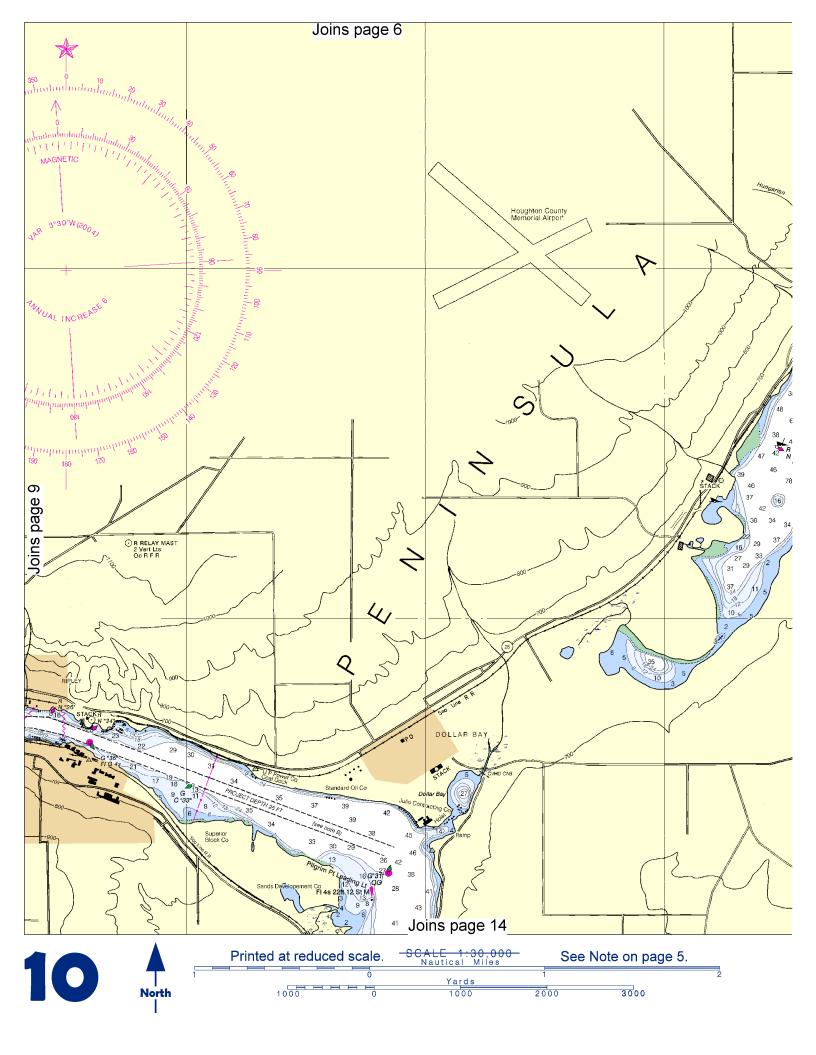


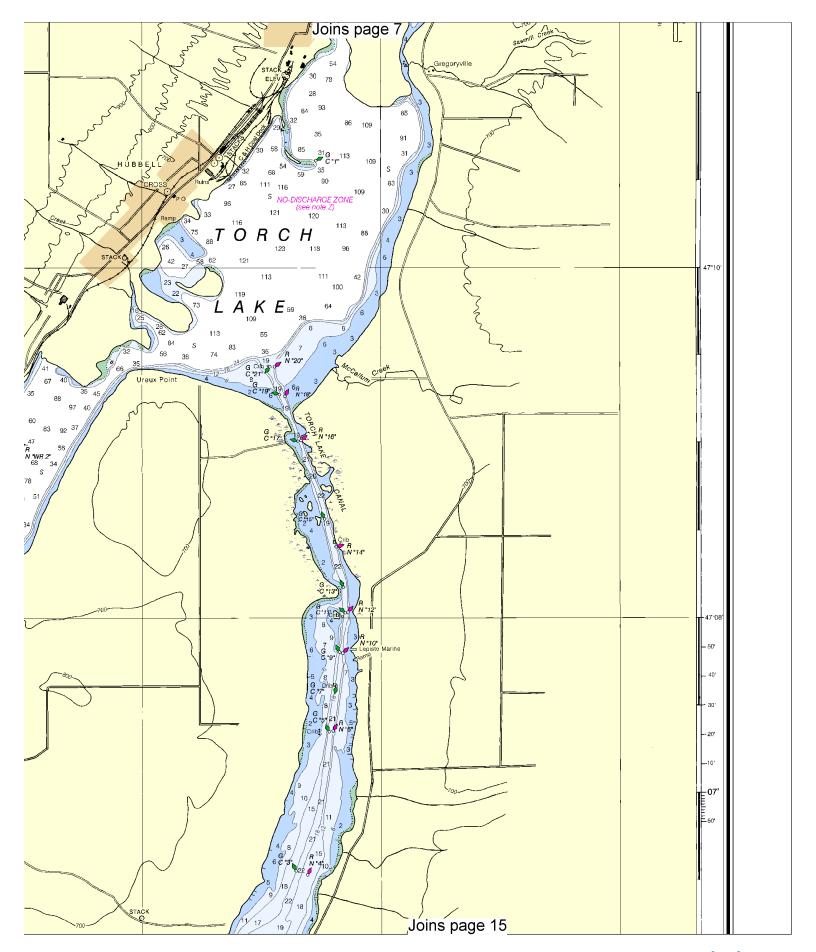


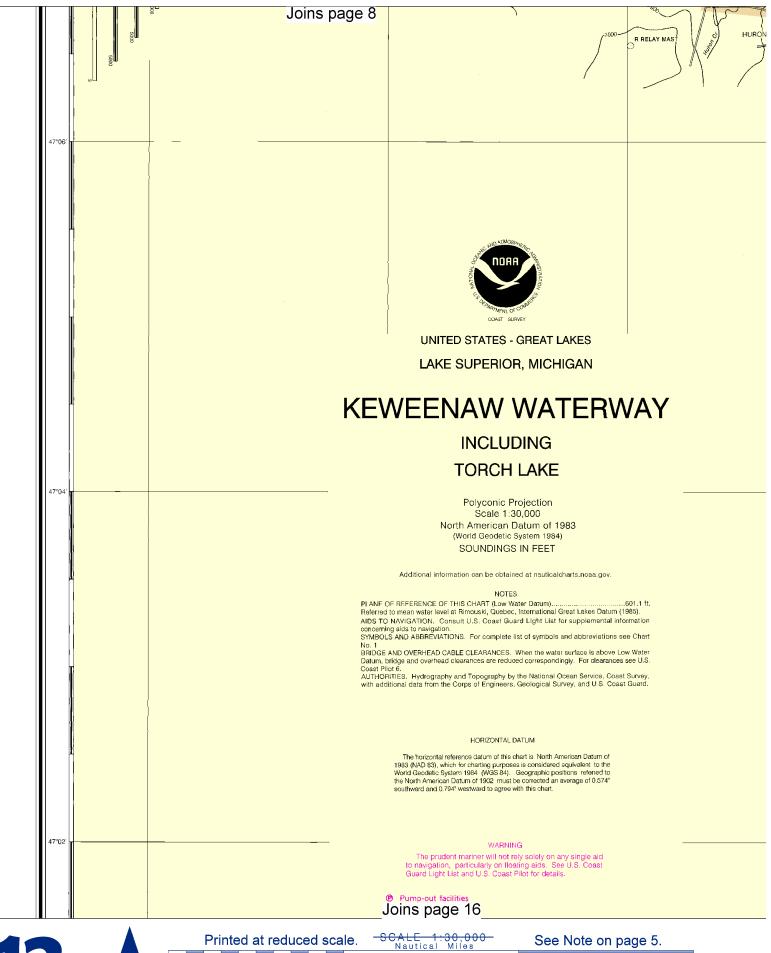




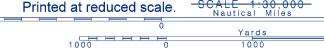


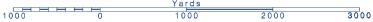


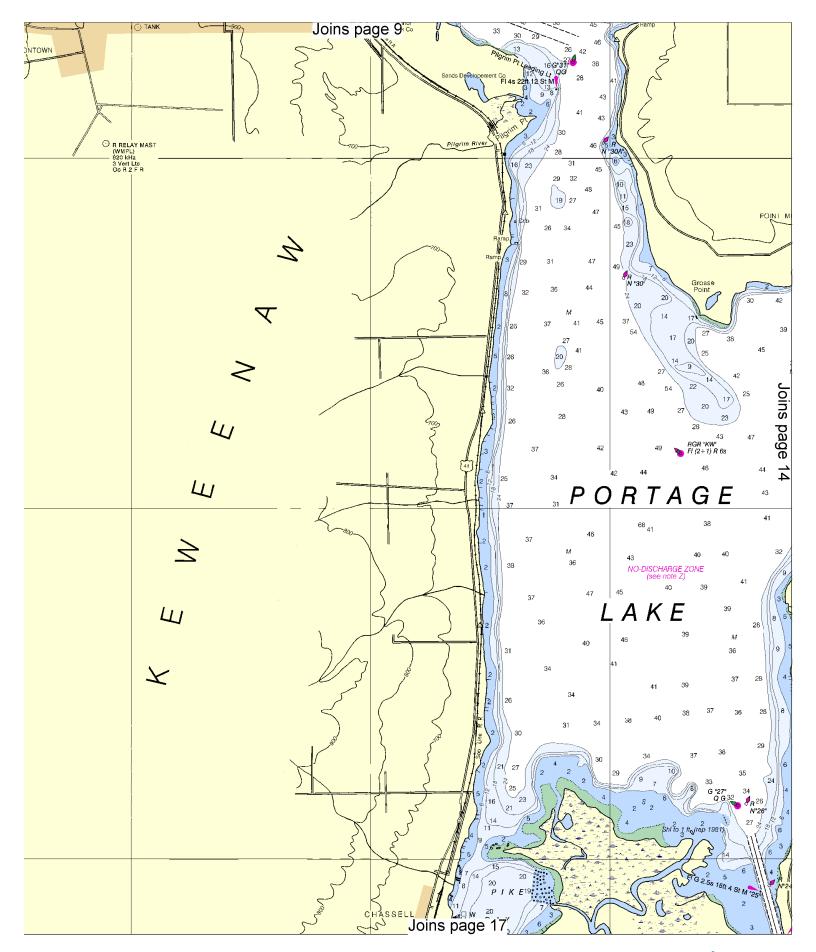


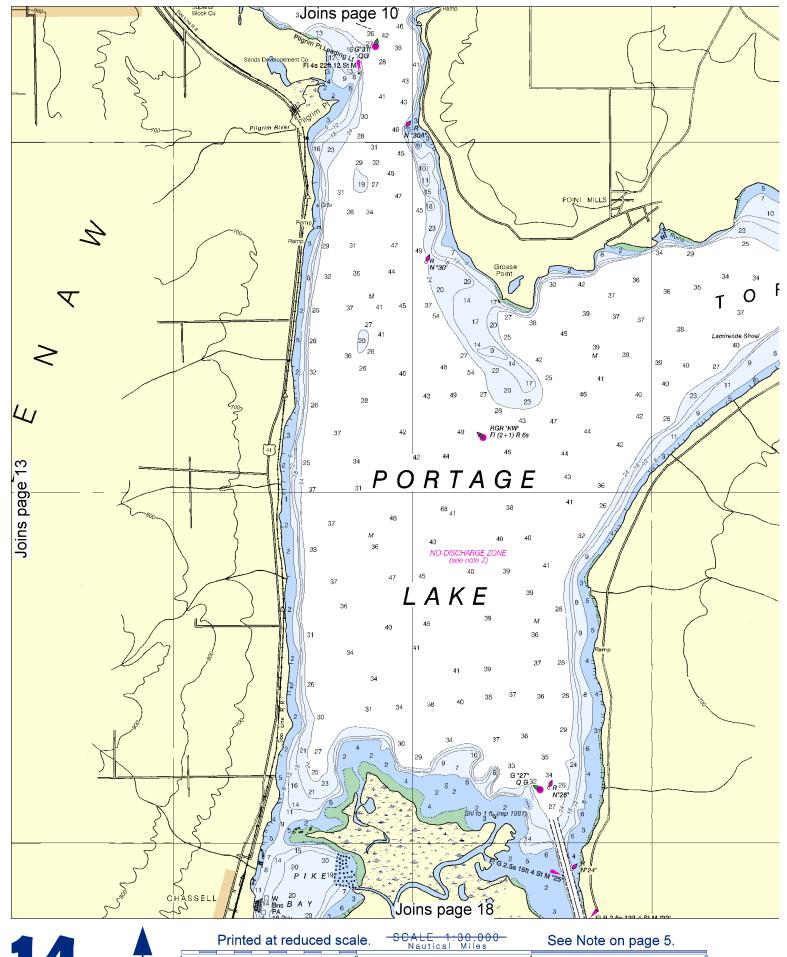




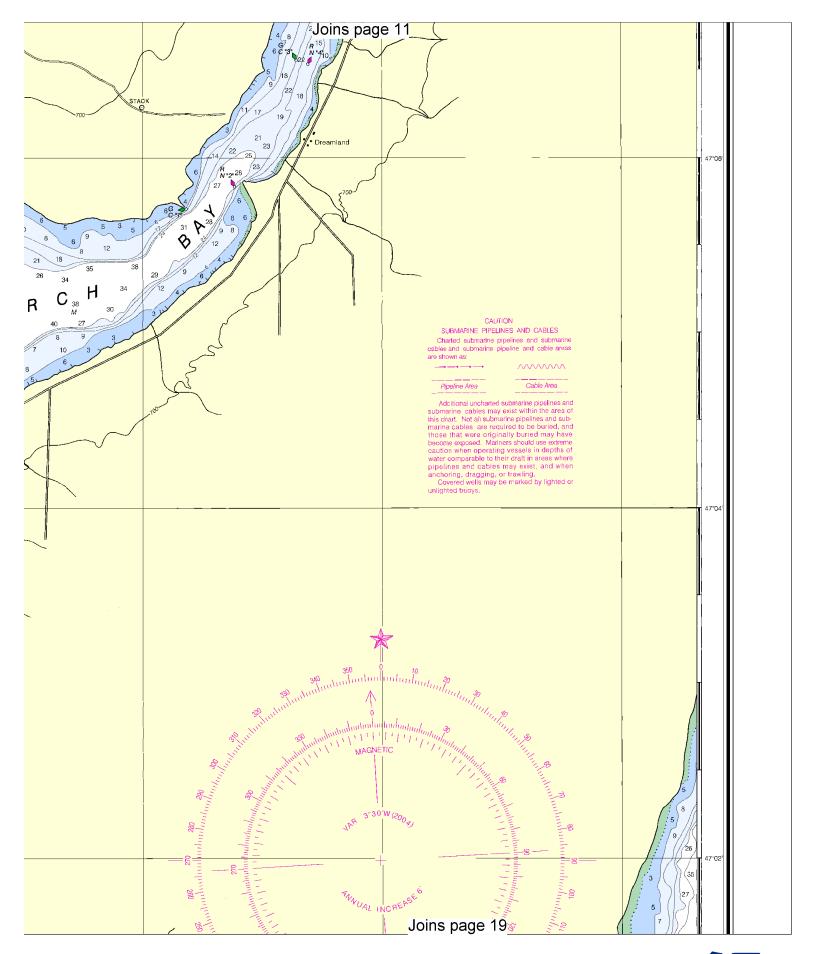


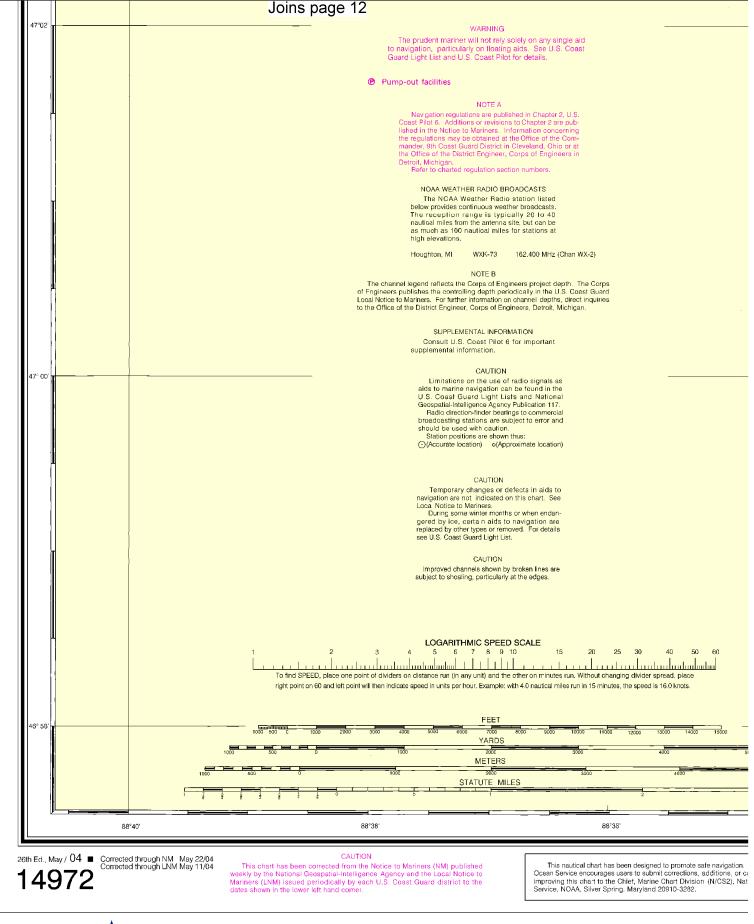




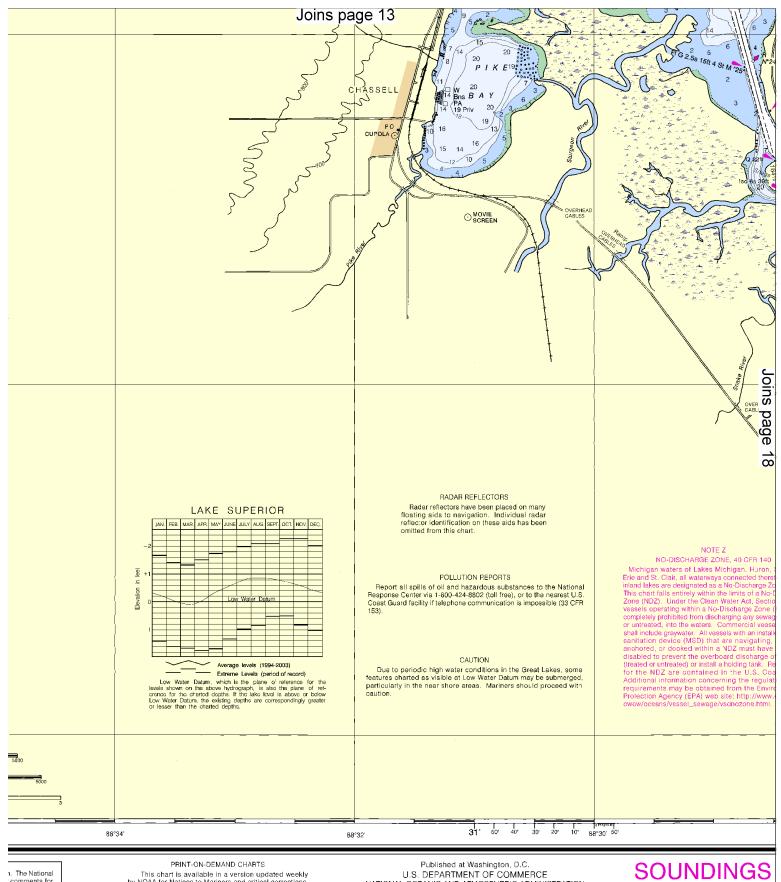






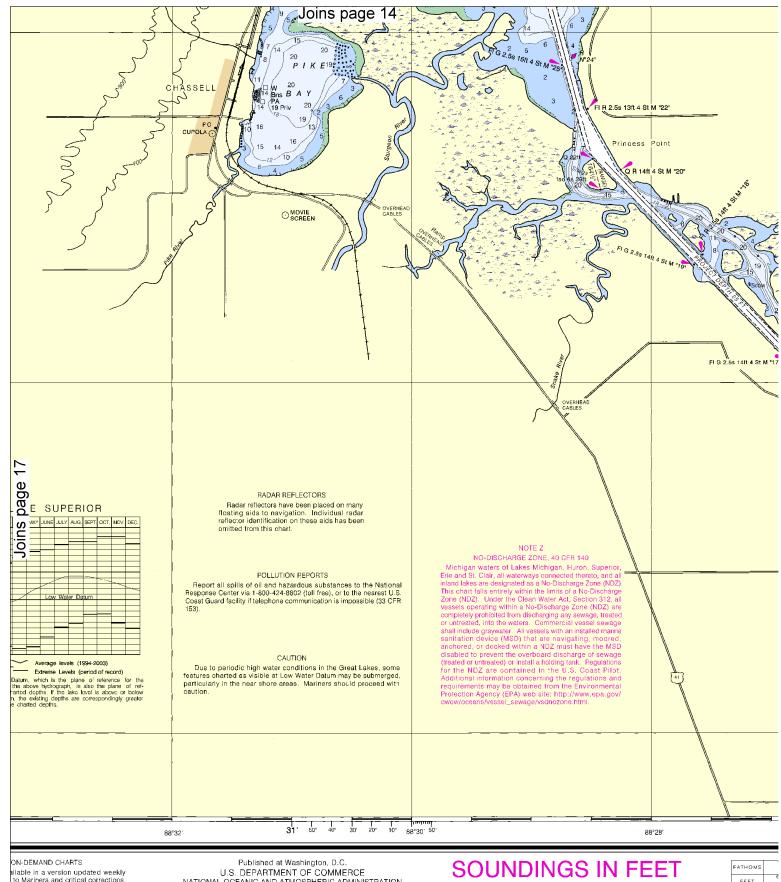






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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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COAST SURVEY

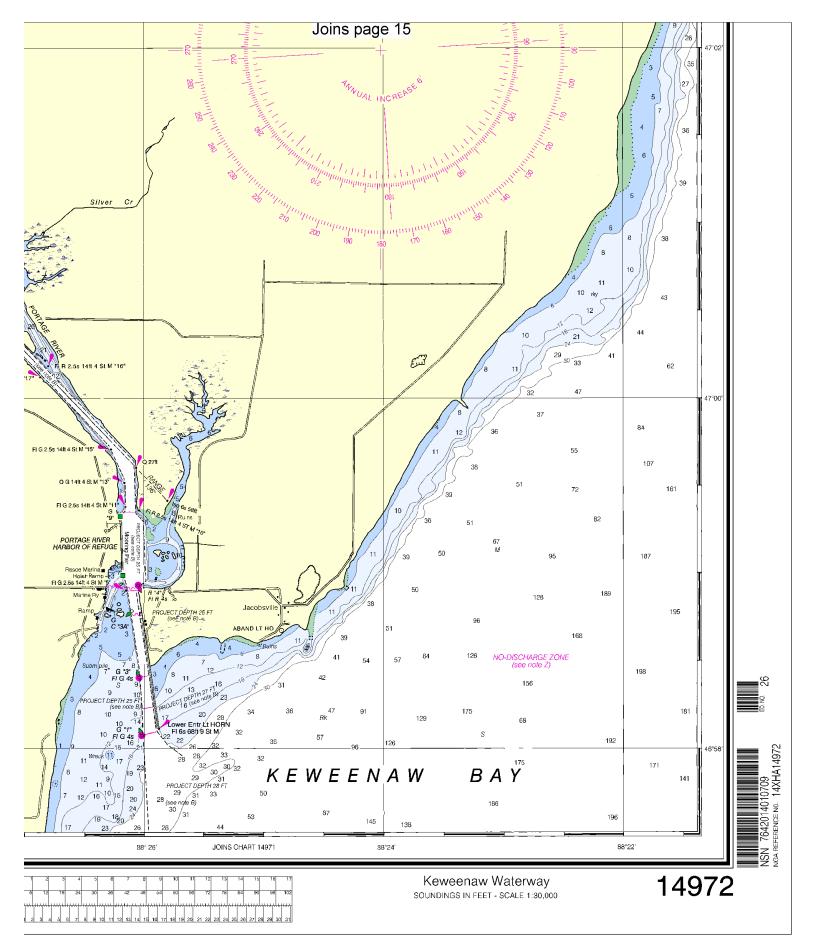


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FEET 6
METERS 1







EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (RCC) – 216-902-6117

Coast Guard S & R (Sault Ste Marie) – 906-635-3230

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

<u>Getting and Giving Help</u> – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts — These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs[™]) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketChartsTM – PocketChartsTM are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.Noa.gov, <a href="